Welcome and thank you for standing by. At this time all participants are in a listen-only mode. Today's webinar is being recorded and the recording will be posted publicly. If you have any objections you may disconnect at this time. Now I'd like to turn the call over to your Host, Ryan Ricciardi. Ryan, you may begin. Ryan Ricciardi: Good afternoon and thank you for joining us today. My name is Ryan Ricciardi and I'm a Statistician with the American Community Survey Office at the U.S. Census Bureau. And with me today is Earlene Dowell, a Program Analyst with the Economic Management Division at the U.S. Census Bureau. This webinar is titled Using Census Tools For Environmental Justice and it will show how you can use Census Bureau data and tools to plan for equity in development, implementation and enforcement of environmental projects in your community. I'd like to remind you that today's webinar is being recorded. If you would like to follow along with our webinar today we have posted the slides online for this webinar. The slides are available at the link you see at the bottom of this slide. The link to the slide is also posted in the chat. A recording and transcript will be posted on our website within the next few weeks at the same link. If you have any questions during the webinar please post them in the Q-and-A section and one of our team members will try their best to respond to you as quickly as possible.

To begin, what is environmental justice? According to the Environmental Protection Agency environmental justice, or EJ, is the fair treatment and meaningful involvement of all people regardless of race, color, national origin or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies. Fair treatment means no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental and commercial operations or policies. One of the earliest codifications of environmental justice into law is Executive Order 12898 issued in February 1994. The order instructed Federal agencies to incorporate environmental justice into their decision making processes, among other policies. You can read an excerpt of the order on this slide and you can read the entire Executive Order 12898 by visiting the link at the bottom of this slide. So who does the Environmental Justice Executive Order cover? It covers two main groups -- minority and low income groups. Minority is defined as a person who is either Black, Hispanic or Latino, Asian-American, American Indian or Alaska Native, or Native Hawaiian and other Pacific Islander. Low income is defined as median household income at or below the Federal Health and Human Services, or HHS, poverty guidelines. These poverty guidelines are updated annually and the 2022 version can be found on the Federal Register at the link at the bottom of this slide.

Now, with that introduction to environmental justice, I would like to introduce you to the U.S. Census Bureau and, yes, we do more than just count people. The Census Bureau is the largest of 13 primary Federal Government statistical agencies and conducts more than 130 surveys and programs each year. In 2020 the U.S. Census Bureau employed more than 10,000 professional staff and 450,000 hourly employees to conduct the 2020 Census. Only three U.S.-based companies -- Walmart, Amazon and Yum Foods -- had worldwide workforces that were larger. While most people are familiar with the Decennial Census that happens every 10 years, we also conduct more than 100 censuses and surveys of households and businesses across the nation each year. This includes the American Community Survey and more than 30 other household surveys. There are also over 60 economic programs. Of these, the Economic Census is the biggest and most comprehensive. There is also information on our nation's public sector provided through the Census of Governments. The Census Bureau's mission is to serve as the nation's leading provider of quality data about its people and economy and our goal is to provide the best mix of timeliness, relevancy, quality and cost for the data we collect and services we provide.

With that brief introduction to environmental justice and the U.S. Census Bureau, let's now go over today's agenda. In the first part of this presentation I will cover the basics of the American Community Survey, or ACS, including how the data are collected, the topics included and the geographies covered. Then I will demonstrate how ACS data can inform justice and equity decisions in environmental planning. From there, I will discuss some of the tools available to help you access ACS data. Then I will turn the presentation over to my Co-Presenter, Earlene, who will discuss census products and tools from the Economic Division within the Census Bureau. Then I will cover some resources available on our website for learning more about ACS and econ data. Finally, at the conclusion of this webinar, we may read aloud any outstanding questions submitted through the Q-and-A feature.

The ACS is on the leading edge of survey design, continuous improvement and data quality. It is the nation's most current, reliable and accessible data source for local statistics on critical planning topics. The survey samples approximately 3.5 million addresses each year. These data are collected continuously throughout the year to produce annual social, economic, housing and demographic estimates. The data collected through ACS is used to distribute more than $675 billion of Federal Government spending each year. Our estimates covering more than 40 topics, support more than 300 known Federal uses and countless non-Federal uses. Examples of some programs that use Census Bureau data to determine funding include the U.S. Department of Agriculture in the Supplemental Nutritional Assistance Program, or SNAP, and the Department of Housing and Urban Development in the Community Development Block Grant Program and the Public Housing Capital Fund. The Census Bureau typically releases three different sets of data estimates from the ACS each year in the form of one-year and five-year period datasets, as well as one-year supplemental estimates. I will discuss these data products in more detail on an upcoming slide. The American Community Survey is part of the Decennial Census Program. It is important to point out how the ACS is different from the census. ACS estimates are based on a sample of the population, whereas the Census is based on the official count of the population. Every year over 3.5 million housing unit addresses are contacted by the Census Bureau to participate in the ACS. The information obtained from the sample is then used to estimate characteristics about the total population in a timely and cost-effective manner. However, these estimates differ from those that would be obtained in a census where every household in the nation is contacted. This results in an element of uncertainty in the ACS data. As such, ACS estimates including margin of error, or MOE. The MOE gives us more information about the population by telling us how much the estimate may vary from the true population value.

What does the ACS collect? The ACS collects information that previously appeared on the census long form, collecting detailed social, economic, housing and demographic characteristics, whereas the census collects basic demographics via the short form, like age, sex, race, Hispanic origin, household relationship and housing tenure. What is produced? The ACS produces population and housing characteristics, whereas the census produces population and housing totals. When is the new data available? The ACS occurs annually, reflecting a period of time over which the data are collected averaging data for 12 months or 60 months, whereas the census occurs every 10 years and reflects a point in time. Census day is April 1st. The content collected by the American Community Survey can be grouped into four main types of characteristics -- social, demographic, economic and housing. Here is a list of all the topics the ACS collects data on grouped into their respective categories. This table contains a list of the topics that may be relevant for environmental justice. The topics in the darker black font may be most relevant to environmental justice. So taking a closer look at the information each of these

categories contain, on the left here we have social characteristics which include topics such as disability status, education and language spoken at home. The American Community Survey also collects basic demographic characteristics such as sex, age, race and Hispanic origin. Economic characteristics include such topics as commuting to work, employment status and income. And housing characteristics include topics such as home heating fuel, home value and vehicles available. As you can see, these topics, either alone or in combination, can be useful for environmental planners, academics or anyone interested in environmental justice. These topics and more are used to produce more than 1,000 tables for local communities each year. Along with the numerous topics covered, the ACS also provides data for more geographies on an annual basis than any other household survey. The image on this slide shows some of the geographies for which ACS data are produced and the relationship between them. Lower geographic areas fit neatly within the larger areas directly connected with lines. For example, school, congressional and state legislative districts fit neatly within states and do not cross state boundaries. However, they may cross boundaries of counties or metropolitan areas.

In this visualization you can also see the smallest geographic building block is the block group. The various available geographies for ACS data are useful for those conducting environmental justice analysis. For example, do you want to know the demographic breakdown of a county zip code tabulation area or census tract? This can be readily available through many of our over 1,000 tables. Environmental justice analysis can be useful when overlayed with other sometimes non-census environmental data. One could overlay smog or other air pollution levels with racial, ethnic, linguistic, educational or poverty data to better understand the differential impacts of environmental pollutants on different communities. The ACS' unique ability to report on a wide range of geographies is what gives it such a broad appeal. Covering a wide range of geographic areas, ACS data are most commonly needed at the state, county, place, census tract and block group geographic levels. This slide illustrates the relationship between these common geographic types and how they are nested within one another, as this example shows in El Paso, Texas. Census tracts are small statistical subdivision within a county with populations of between 1,200 and 8,000 people, so think small towns, rural areas and neighborhoods. Block groups are a group of blocks within a census tract of between 600 and 3,000 people, as you can see blown out in the right corner of the screen. Again, the ACS has the ability to report on a wide range of geographies, as well as to provide data at very granular levels, like census tracts and block groups. A few slides back we mentioned the different products the ACS provides. These data products are released about one year after the data are collected. ACS data are generally released in September the calendar year after collection as one-year estimates, in October the calendar year after collection as one-year supplemental estimates, and five-year estimates are generally released in December of the calendar year after collection. For example, the one-year ACS data collected from January 1st through December 31st of 2019 were released in September of 2020. ACS one-year estimates, which combine data collected over 12 months, are available for geographic areas with a population of 65,000 or more. ACS one-year supplemental estimates are a subset of detailed tables that are available for geographic areas with populations of 20,000 or more.

One-year supplemental estimates are a simplified version of popular ACS tables and provide the most current data to almost twice as many geographies compared to the standard one-year release. And ACS five-year estimates combine data collected over 60 months and are available for geographic areas of all sizes down to those granular census tract and block group levels. The full detailed data release schedule for each year is available on the link you see on the slide, which you can also navigate to by visiting

census.gov/acs. Now that I've discussed the basics of the ACS, let's now investigate how ACS data can be used for environmental justice analysis. So how can the ACS be used for environmental justice purposes? The demographic, social, economic and housing data is essentially one-half of the environmental justice picture. Recall, environmental justice is essentially the intersection of population and environmental data. So ACS data can be used to incorporate social equity in Federal, state and local planning projects. Additionally, because impact areas may be small, such as at the neighborhood level, one could filter data down to the zip code tabulation area, census tract or block group level, as shown on a previous slide. Lastly, another benefit of using ACS is that it is continuously updated. We release new data annually in the form of one-year and five-year estimates, as well as one-year supplemental estimates, as I also discussed earlier. The picture shown on this slide is an example of the application of ACS for environmental justice purposes. The Environmental Protection Agency's Environmental Justice Screening and Mapping Tool, also known as EJScreen.

This tool uses ACS data to provide continuously updated demographic, social and economic characteristics of the population in combination with various kinds of environmental data, like ozone levels and prevalence of lead paint. A benefit of EJScreen using ACS data is that the tool can be continuously updated with each annual ACS data release. By combining ACS's demographic, social and economic data with environmental data the EPA is able to maintain a mapping tool that aids those interested in environmental justice. On EJScreen one could toggle various socioeconomic indicators, such as percent of people of color and percent of low income, along with various environmental indicators. EPA uses EJScreen as a preliminary step when considering environmental justice in certain situations. The agency uses it to screen for areas that may be candidates for additional consideration, analysis or outreach as EPA develops programs, policies and activities that may affect communities. There is also a new Census Bureau data product called the Community Resilience Estimates, or CRE. The CRE tool provides an important metric to measure the risk of every neighborhood in the United States should disaster strike.

These data are produced using a combination of ACS and Population Estimates Program, or PEP, data. The CRE is more relevant, timely, precise and granular because we used restricted micro or person level data to create it, something only the Census Bureau has access to. The CRE program provides an easily understood metric for how at-risk every county and neighborhood at the census tract level in the United States is to the impacts of disasters, such as hurricanes, floods, earthquakes, wildfires and pandemics, such as COVID-19. Modeled estimates are based on 10 resilience related risk factors, shown on this slide. These estimates are modeled using ACS one-year microdata, the Census Bureau's PEP program data and small area modeling techniques. The result is a product that better measures the social vulnerability. CRE displays the number and percentage of residents living with zero risk factors or low risk, one to two risk factors or moderate risk, and three or more risk factors or high risk. Although CRE was designed to measure social vulnerability to assist in disaster preparedness and recovery it is nonetheless a potentially useful tool for environmental justice researchers and planners as natural disasters could have an environmental justice dimension to it. The CRE will continue to be released each year. Here you can see the community resilience estimates in visual format. The areas in a darker shade of orange indicate areas with higher levels of vulnerability, while the areas in a lighter shade of orange indicate lower vulnerability.

The CRE can be accessed through the link shown above and they can also be found on data.census.gov. Here we have a real-life example of ACS data in action in emergency management planning. In the

aftermath of Hurricane Katrina the organization Evacuteer worked with the City of New Orleans' Homeland Security and Emergency Preparedness Office to use ACS data to plan the location of 17 evacuation points throughout the City of New Orleans. These evacuation points, called Evacuspots, are designed to evacuate 40,000 people in 36 hours. Evacuspot locations are marked throughout the City of New Orleans with these statues, shown in the image. The goal is to reach populations in need by measuring social vulnerability in census tracts with ACS data on public transportation, vehicle availability, disability status, age, especially with regards to the elderly population, language by the ability to speak English, poverty status and educational attainment. Now that I've shown how ACS data can be used to inform environmental justice planning and research let's take a look at how to access ACS data products. Catering to a variety of data users with unique needs we have a variety of data access tools. This is a list of a few of those tools. QuickFacts provide selected statistics for all states and counties and for cities and towns with a population of 5,000 or more using the ACS, as well as other Census Bureau datasets. My Congressional District gives you quick and easy access to selected statistics collected by the ACS and county business patterns. My Tribal Area gives you quick and easy access to selected ACS statistics for tribal areas.

OnTheMap for Emergency Management provides data for disasters, natural hazards and weather events using the ACS, as well as other Census Bureau datasets. Census Business Builder provides selected demographic data from the ACS and economic data from the Census Bureau to help users start or grow a business or understand the business landscape for a region. data.census.gov is the Census Bureau's main data dissemination platform to access Census Bureau statistics. My Community Explorer is an interactive map-based tool that highlights demographic and socioeconomic data that measure inequality and can help inform data-based solutions, this tool is designed to help users identify underserved communities as directed by the President's Executive Order 13985 on Diversity, Equity, Inclusion and Accessibility in the Federal Workforce. Census COVID-19 Data Hub provides demographic and economic resources to assist communities concerning the current pandemic. TIGER Line Shapefiles with selected demographic data or topographically integrated geographic encoding and referencing shapefiles are available pre-joined with ACS five-year estimates containing selected demographic and economic data in geo database format. And, lastly, Application Programming Interface, or API, let's developers create custom apps to reach new users and makes key demographic, socioeconomic and housing statistics more accessible than ever before. All data tools are available from census.gov. Choose the Explore Data tab from the blue ribbon at the top of the screen, then click on the Data Tool and Apps tab to view a comprehensive list of census tools and apps. I will now conduct a live demonstration of how to access a table that could be used for environmental justice purposes. I will demonstrate how to access a data profile, and data profiles are tables that contain a variety of widely requested data. So first let's go to data.census.gov. Then we're going to go ahead and click advanced search, then on the left under find a filter let's click surveys, then American Community Survey, then five-year estimates, that's the most recent one we have available, and then we're going to select data profiles. Now you can apply other filters, for this demonstration I'm going to select a geography, St. James Parish, Louisiana. Although Louisiana calls them parishes they're categorized as counties, so let's select counties. So geography, county. It'll bring you to your state, list of states. So let's scroll down to Louisiana. And then the geography we're looking for is St. James Parish. So we'll scroll down, it's in alphabetical order, and I see St. James Parish. So let's select that. Now from here we will click search and this brings you a list of the data profiles, which we selected earlier, and they are all for St. James Parish, which you can also see

the geography on the right here, and there are multiple data profiles, we have four of them. I am going to select this first one, DP05 ACS Demographic and Housing Estimates.

Table DP05 is a data profile, a popular table that contains a plethora of popular and useful information, including race and ethnicity, age, sex and more. You can filter tables by a wide variety of geographies, as I mentioned earlier. Here, Table DPO5 is for St. James Parish, Louisiana, a parish in Louisiana that is commonly cited as an example of environmental injustice. St. James Parish is a part of an area sometimes referred to by academics and others as Cancer Alley, which is a region of several parishes in Louisiana that has a high concentration of petrochemical production. The area has been noted in studies for having higher rates of cancer. The area additionally has population proportions of Black or African-American people that are higher than the national average. Thus, Cancer Alley is a commonly cited example of environmental injustice. ACS data allows researchers, planners and others to better understand the populations who live in Cancer Alley. Although this table shows the entire parish, one could further narrow down the geography to provide data at the census tract or block group level. And I will scroll down here just so you can see a little bit more of some of the data that they have that breaks it down by sex and age at the top, but as you can see it's a pretty detailed table and has information on race, one race, and so and so forth, race alone or in combination, Hispanic or Latino. So it is important to note that ACS only provides demographic, social, housing and economic data. It must be combined with environmental data in order to produce an environmental justice analysis. And, with that demonstration out of the way, I will go back to the PowerPoint.

And, with that, I will turn it over to my Co-Presenter, Earlene. Earlene Dowell: Thank you, Ryan. All right. Well, good afternoon, everyone, and today I will be sharing with you a little bit about the Longitudinal Employer Households Dynamic Program, or the LEHD Program, and its products. First, we'll look at where the data comes from. LEHD products are different from other census data in the fact that our data comes from our Local Employment Dynamics, or LED, partnership, which is the voluntary Federal, state partnership. Its main purpose is to merge employee data and employer data to produce a collection of enhanced labor market statistics with state-of-the-art confidentiality protection. Under the partnership states send their unemployment insurance wage records and their quarterly census of employment wage data, which is then combined with censuses and surveys to create this dynamic information as workers to produce public use data products, as well as microdata for research. The UI records give us job data, the QCEW gives us firm data, and our person data comes from censuses and surveys. When I first started working for the Census Bureau we had two datasets and three data tools, now LEHD has three main datasets and two experimental datasets with seven different data tools for easy access. Each dataset along with each data tool is unique in its own way.

If you are curious about employment, hires, separations, turnovers and earnings you would look at the quarterly workforce indicators, or QWI, utilizing QWI explorer or the LED extraction tool. If you want to look at employment for detailed and customized geography you would look at the LODES data using OnTheMap or OnTheMap for Emergency Management data tools, and coming next year in the LED extraction tool. OnTheMap for Emergency Management is the only data tool that's part of the LEHD suite of tools that has population data, along with data from other Federal agencies. If you want to look at statistics on job mobility across state boundaries or industries, transitions between jobs by timing and firm or worker characteristics or earnings changes due to job changes you would use the Job-to-Job or J-to-J flows data using the J-to-J explorer and also coming soon in our LED extraction tool. One of our newer datasets is the post-secondary employment outcomes, or PSEO. This experimental dataset

reports earnings by institution, degree field, degree level and graduation cohort for one, five, and 10 years after graduation and is accessible through the PSEO explorer. The current release includes 17 participating states, with more to come in the near future. Finally, we have another experimental dataset called the Veteran Employment Outcomes, or VEO. This new experimental dataset reports earnings and employment outcomes for U.S. Army veterans one, five and 10 years after discharge by military occupation, rank, demographics, industry and geography of employment.

This is also accessible through our VEO Explorer. In addition to the data tools, raw data downloads are available, along with LEHD microdata for approved projects through our secure Census Research Data Centers. Today I will just be covering only two of the data tools, OnTheMap and OnTheMap for Emergency Management, to demonstrate how these two data tools can be used in planning, implementing and enforcement of environmental community projects. In 2020 an article out of South Dakota during a COVID-19 breakout at a popular manufacturing pork plant that was located in Minnehaha County, South Dakota utilized LODES data to track where workers from a plant in Minnehaha County resided. The data show that many that worked in Minnehaha also lived in Minnehaha, but the next largest of the workers resided in Lincoln County. The data also pointed out that there were a number of Native Americans who worked at the plant and resided at nearby reservations where there is a lack of medical resources to a vulnerable population. So here we're going to be looking at how we can utilize OnTheMap and OnTheMap for Emergency Management during COVID-19. OnTheMap is a robust data tool that allows users to analyze workforce characteristics, all the way down to a census block. The tool allows analysts to look at workforce compositions by industry and demographic characteristics, along with worker inflow and outflow and commuting patterns. This analysis shows you in the direction of where workers are coming from who work in Minnehaha. The article also talked about how Lincoln County was the second largest county with workers that commuted to Minnehaha, which is shown here in the table on the right. In this screenshot we were able to use the base map to locate tribal lands and tribal subdivisions.

When we changed the results to top 25 counties we can visually see the spokes reach to these vulnerable populations. We can also change the analysis setting to area profile to look at the details of the worker race and earnings. So let's go live to look at this example. So the easiest way to get to OnTheMap is probably if you Google OnTheMap, which is one word, and it'll bring you to the OnTheMap webpage or you can remember OnTheMap.ces.census.gov. And I just want to let everyone know that Chrome and Firefox play best with our applications just because we have so many details and so many graphics to download. So here I will go ahead in the search box and type in Minnehaha, and then I'll click search, and once I do that all of the different geographies that have Minnehaha comes up. So we're going to be looking at Minnehaha County, South Dakota. Once I click on that another popup comes up and the map zooms into Minnehaha, so what we're looking at is how many square miles are in this selection area and how many census blocks. The application is so intuitive that you're going to know that the next step would be to perform analysis on the selection area. Once I do that another popup comes up and it has all those different analysis settings. So in the first column we can see where the worker lives or where the worker works. In the next column we have different types of analyses that we can look at. Today we're going to look at the area profile, which is an overview of all the different characteristics in the selected area, and then we're going to look at destination also. You can choose up to as many years as you want, all the way up to 2002. So if you want to put it all in there you could if you wanted to, and you can change the job type so that all job is every single job that's out there. If you have

more than one job that's where it would be, and then primary jobs is the jobs that bring home the most income. And then for the private jobs, all private jobs and the private primary jobs, that's just pretty much just private jobs. If you hover over any of the question marks throughout the application you'll get a definition of what you're looking at. So at this point we're going to do the destination first, and I'm going to click on the destination type.

We want to look at counties, and then here where there's this lighting bolt, go, exclamation point, I'm going to click on that. Once I do that the map updates and then a table comes up also, and you can see a little bit of a graph as well, but here in the table you can see all the counties, you can see Minnehaha is the first county and you can see Lincoln county. So these are workers that work in Minnehaha, but live in Minnehaha County, Lincoln County or Brookings. So this, these are the top 10 right now that we're looking at. So I'm going to click on this spoke overlay here in the left-hand side under map controls just so that we can give you a visual. So like when you're thinking about COVID-19 and you're thinking about the infection in Minnehaha this is where it's all going out to. And then if you click on the base map and if I scroll down a little bit and I'm going to click on tribal lands, you can now see and I'm just going to zoom out just a bit so you can see it better, you can see the different areas that are tribal lands, as well as tribal subdivisions. But if I go ahead and do this, if I change the top results, right now we're just looking at the top 10 counties, but if I click on top 25 the reach starts to go out a little further. And you can see, you know now we're starting to touch the different tribal lands, but if I go out to 50 -- Now you can see the visual and what, you know what a visual it gives you about how you know COVID-19 at the time was spreading, if you worked in Minnehaha at this pork plant. So we'll go ahead and change the settings a little bit, so down in the lower left-hand corner I'm going to click on change settings.

And now I just want to look at area profile, and then I'm going to go ahead and click go again. So area profile gives you more details about the different characteristics, it gives you what the total jobs are again, it also gives you the worker age, their earnings, but we can look at the NAICS industry and we can see that you know 10% of the workforce worked in manufacturing. And then we can scroll down more and we can look at the worker race. So where it says American Indian we can see that it's 1.7%, but 1,871 people that's really a lot of people. And if I click on American Indian the map actually updates and we can just see just those American Indians. Okay, so going back to the PowerPoint, we're going to shift gears a little bit and now we're going to talk about OnTheMap sister map, OnTheMap for Emergency Management. So OnTheMap for Emergency Management is a public data tool that provides an intuitive web-based interface for accessing U.S. population and workforce statistics in real time for areas being affected by natural disasters. The tool allows users to retrieve reports containing detailed workforce, population and housing characteristics for hurricanes, flood, wildfires, winter storms and Federal disaster declaration areas. OnTheMap for Emergency Management has population data from the American Community Survey and 2010 Decennial. Economic data comes from the LEHD origin destination employee statistics or the LODES data, along with data from other Federal agencies. OnTheMap for Emergency Management has been named mission critical by the Department of Commerce, that means if anything should happen, such as a shutdown, the application will continue to be available to the public. OnTheMap for Emergency Management tracks tropical storms and hurricanes, floods and freezing temperatures and snowfall from our sister agency NOAA. It also tracks fires from the Department of Agriculture and Department of Interior and, finally, the map covers disaster declaration areas from the Federal Emergency Management Agency. All of these data are combined with census data. We have data from 2010 to 2019 for most of the 50 states, including DC.

You can customize the selection area as low as places or cities with disclosure protection and output reports are available, which means you can export shape files and download and print reports and maps. You can also share event links on social media or with colleagues. OnTheMap for Emergency Management can assist in identifying vulnerabilities -- social vulnerabilities, physical vulnerabilities and economic vulnerabilities. Using the ACS we can see social and physical vulnerabilities, we can see households with one or more people 65 years or over, we can see if they are disabled, and we can see a house heating fuel or year structure was built to name a few physical vulnerabilities.

Using the Decennial data we can also access the physical vulnerabilities, whether a house is occupied or vacant. And to economic vulnerabilities using the LODES data we can look at total number of workers in the impacted area, the industry impacted in the area, and earnings for money lost to workers in the impacted area. Because I'm very familiar with this case study we are going to jump into the Emergency Management Declaration 3475. Here we can look at the vulnerabilities, such as race, ability to speak English or ethnicity. And just to let you know the 3475 is the South Dakota, the State of South Dakota during COVID-19, when all 50 states were declared a disaster declaration area because of COVID. We can also dive deeper into the geography and choose to just look at Minnehaha County and its vulnerabilities. So let's go live again and same thing, the easiest way to get to OnTheMap for Emergency Management would be to Google OnTheMap, one word, and type in for emergency management, or you can remember OnTheMap.ces.census.gov/em. All right, so right now we're looking at real-time data. We can see that there's a little bit of pink snowflakes, which means snowfall up in the northern areas. We can see a little bit of wildfires that are going on in the Midwest, some flooding that comes around is the yellow houses, and then all of the orange life preservers are the disaster declaration areas. On the lefthand side you can see all of the current events that are happening, and there are a lot of ways that you can go into the different events. You can click on the map, you can type in the search box, and all sorts of different things. So we're going to type em-3475, and then it automatically comes up, COVID-19 pandemic, but I just want to kind of show you this little filter. If you wanted to just look at certain things you can just choose to look at tropical storms or wildfires or floods, et cetera, but I'm just going to go ahead and I just wanted to show you that. So we're going to click on em-3475, and then it zooms into OnTheMap for Emergency Management, and then this is where we're looking at the ACS data. So we can scroll down and we can see what the different race is that was impacted by COVID-19.

We can see what, how many American Indians live in South Dakota, so we can see 62,812. We talked about the disability status by age, but there is also disability status by poverty status. And you can click on all of this and everything kind of updates on the map, as well as the bar charts. And then we can scroll down and we can see the year the structure was built and how many homes were actually built, which is a lot, before 1939. And we can look at mobile homes, how many mobile homes, like for example if there was a tornado that went through how many of those homes might be impacted on that and so on. Oh, and then the house heating fuel, so we can look at that and then we can see you know the possibility of during a snowstorm how many people might lose electricity. So anyway those are some of the vulnerabilities that we can look at. And then we can click on the topic and we can look at the workforce employed in the event area. So again we're still looking at South Dakota, but if I change this event area I'm going to go ahead and click on this and click on counties, and Minnehaha comes up at the top. So I'll select Minnehaha, and it zooms into Minnehaha, and we are still looking at the workforce employed, and then as we did in OnTheMap we can see industry sector and we can see what is manufacturing again, and we can look at what the educational attainment is, what the earnings are, and

then so on, and then the race. So also wanted to let you know if I click on this hyperlink right here it takes us straight to South Dakota, COVID-19, and it tells you what the funding obligations are, and then there's the designated areas, a couple news releases and reports.

And we'll come back to that and I'll show you some more cool stuff on that. So using another case study, this was in 2014 with Elk River chemical spill. On January 9th, 2014 more than 10,000 gallons of a coal cleaning liquid spilled from two above-ground storage tanks into the Elk River. This river was the sole water supply for the Charleston, West Virginia area. Residents of nine counties in West Virginia were impacted when an estimated, as we said, 10,000 gallons were spilled. So these counties included Boone, Clay, Jackson, Kanawha, Lincoln, Logan, Putnam, Roan and Cable County. Again utilizing OnTheMap for Emergency Management we can once again use the Emergency Management Declaration EM-3366 to look at the vulnerabilities of the population. And so we'll go live in a minute to work through this example. In this screenshot using the advanced selection tool, now we've actually hopped over to OnTheMap, we can actually import the KML shape files into OnTheMap from the FEMA Disaster Declaration areas. And it also, we can look at another screenshot where we can look at the vulnerabilities of where the workers live and their education level. We can even click on specific characteristics to see the location of where they live on the map. So let's go live again, that was a lot, and we're going to go to the OnTheMap for Emergency Management again, and I'm just going to refresh it and I will type in em-3366 and that'll bring me to the Emergency Declaration. Again we can see West Virginia, and then if I click on the em-3366 it takes me to the West Virginia chemical spill, and then we're going to go ahead and click on the designated areas. And here where it says Google Earth I'm going to download that. So I'm going to go back to the OnTheMap tab and then I'm just going to reload this so that we have a clean slate, so we can work on this. And now where it says import from KML I'll click on that. We're going to choose file, it should be in my downloads, and then I'm going to import that. So once I import that it goes into the map, we can zoom to import its shape so we can see it a lot better, and here are the nine counties that we talked about earlier. So I'm going to go ahead and click on select all polygons, because we want to look at it all, and then we'll go ahead and click on continue with selected features. And then it comes into the advanced section for OnTheMap. So here we can just go ahead and click on confirm selection, and then we'll click on perform analysis, and then we're going to look at the area profile again, and now we can see what the total count of private primary jobs were in that area. But I had talked about the worker educational attainment, so I thought this was very interesting to see that 26.2% had high school or equivalent and then 25% had, 25.5%, so you know there's a possibility at looking at low skilled workers at this point.

So another really cool thing that I like that OnTheMap does is like if I zoom in just a little bit and I'll click on this identify and I can click on one of these little bubbles and that represents the different blocks and how many jobs are in that block. So we can see in these block numbers all of the different areas that have workers. You can also click on, you remember earlier we clicked on just the blue hyperlink, and then we can also do it again, identify, and now we're just looking at characteristic high school or equivalent, no college, so all in these different blocks. And look at this one, this one has 523 that have only a high school education. It's just very fascinating stuff, so close out of that, back to the PowerPoint, and then we're going to just finish off with one more example. So this is a diagram, this is just a diagram that shows the analyzing of the chemical concentration on day one through day nine and the flow of the chemical spill down the river. So we are just using this visual to demonstrate the selection drawing tools for OnTheMap. So by drawing a line down the river and then creating a ring that's maybe five miles out

we can see the worker population of those who may be impacted by the contaminated water source. So let's go ahead and do this again, we're going live, and I'm just going to reload this, give us a clean slate one more time. And then in the search box I'm going to type in Charleston, click on search, and then we will go down to see cities, and then I'll click on Charleston City, West Virginia. And instead of clicking on the perform analysis I'm just going to click out of that box and I'm going to zoom in just a bit so we can see the river. Maybe zoom out just a touch. So we know that the chemical spill kind of started up here in this area, so I'm going to click on the selection tab, I'm going to clear this selection, we don't want to look at any of that. I'm going to click on the layer, we don't want any type of layer, so we're going to click on no selected layer. I'm going to click on draw line, and I'm just going to draw a little line that goes down the river, and this is what we're talking about when you can do your own custom maps. So I'll do a double click, and then we can see the line that we want to look at. If you know the story, the chemical spill actually went into further down the river into these areas and affected quite a few states regarding this spill. And then we're going to do two things, so in the PowerPoint I did a simple ring, I clicked on five miles, I put in five miles, and then I confirmed the selection area and that's kind of a lot of space, but you can also do this. So I'm going to click out of that again, and I'm not going to do a five ring, I'm just going to do a little bit of a buffer, in fact. And I'm going to do like maybe a 0.1 and maybe a 0.5, and then I'm going to confirm selection area. So isn't that cool? So we can actually do an analysis on just that area that I've chosen, and then here we are again just to show you this. You know, this probably wouldn't be -- but I want to show you how this commuting path works, so we'll look at the inflow, outflow. So maybe people have to get people out of there, out of the area because of the affected contaminated water, but we can see that 9,488 people travel into that little area to work, 200 people live in that area, and then 100 -- I mean 1,326 live in the area, but work outside of the area. So you know we're looking at 9,688 people that were probably infected by this chemical spill. So going back to the PowerPoint, I'm just going to finish off with a couple resources for learning more for OnTheMap. So we have the OnTheMap link here. We have a lot of help and documentation, so everything that I went through this link will help you, walk you through all the different steps.

We have demos and user guides for OnTheMap and then for OnTheMap for Emergency Management here is that link, along with the help and documentation and demos and user guides. So, with that, I will pass it back to Ryan to finish off the other resources. Ryan Ricciardi: Thank you, Earlene, for that presentation. Let me share my screen. Okay, so finishing up, regarding the ACS, first we have the ACS main page. This is a great tool to start with if you have questions about ACS. This page can be found too by going to census.gov, selecting surveys/programs, and then selecting ACS, or simply go to census.gov/acs. The ACS website contains a lot of information about the survey, data products, tools for data users, and other helpful information. Links to our data tables and tools pages can be found through the ACS data page. These web pages will introduce you to the most popular tools and data products with descriptions and links for each. The data tables page, shown in the top right, explains each type of ACS table through a series of dropdown tabs. For example, you can click the data profiles tab to learn what topics they cover, which geographic areas are available for data profiles, and common ways to access data profiles. Similarly, the data tools page, shown in the bottom right, explains each of the tools available for you to access ACS data and another series of dropdown tabs. For example, you could click on the QuickFacts tab to learn about the topics included, the years available, and the geographies available for quick facts, as well as the link to the data tool. These pages are designed for data users of all skill levels. They succinctly explain the ACS data tables and tools available for data users like you. As I begin to wrap-up today's webinar, we invite you to stay in touch with us by telling us how you use data

from the American Community Survey. Have you or your organization used ACS data for environmental justice research or planning purposes? If so, please tell us about it by visiting the link at the bottom of the slide to share your story. Furthermore, you can explore all the other ways people are using ACS data and our various share your story publications. If you are looking for further assistance on how to obtain or understand ACS data our Data Dissemination Specialists, or DDS's, who are located within your region can provide you with assistance about Census Bureau data. These specialists usually provide help in English, but sometimes in other languages as well depending on the needs of their communities. Whether conducting one-on-one webinars with business startups or conducting large-scale presentations at universities these specialists strive to put the public in touch with the data they need. DDS's provide a wide variety of assistance for free. If you are interested in a specific type of training or presentation please reach out to a specialist in your area using the contact information on the slide. In closing, I encourage you to connect with us directly. You can reach out to either the American Community Survey Office or the Economic Division by phone or by e-mail at the contact information listed on this slide. You can also visit our respective websites to learn more about each topic. And, with that, I want to thank all of you for joining us on this webinar today. Again, a recording of today's webinar, along with the slides and the transcripts, will be posted online shortly. This concludes the webinar. I hope you have a great day.